



Lonnonson Arbor Care

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Leo Suver
Suver & Burnstead Homes
11980 NE 24th St. Ste. 200
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Re: **Tree Inventory Report** for 7303 Renton-Iss Rd, Issaquah (Parcel # 2924069052)

To Whom It May Concern,

This report documents the inspection and identification of significant trees on and next to the property mentioned above. The survey table on the next page lists the species, size, condition, and viability of each significant tree. Site maps of the land and trees are included at the end of this report.

On September 14, 2020, 174 significant trees were measured (using diameter tape for tree trunks) and are tagged with a number engraved metal strip. The trees' trunks were measured 4 ½ feet from the ground and is defined as the Diameter at Standard Height (DSH). Significant trees in Issaquah are those with trunks 6.0 inches DSH and greater.

These terms describe the inspection data on the following page. The tag number corresponds with the data about the subject tree. The number within the brackets is the total DSH for multiple trunks derived from the square root of the total diameters of all trunks; $DSH = \sqrt{[(DSH1)^2 + (DSH2)^2 + (DSH3)^2 + \dots]}$. The Limit of Disturbance (LOD) is the radius around the trunk that should not be disturbed during grading and construction in order to preserve the root zone. The LOD is determined by species, branch length from trunk (dripline), DSH, surrounding conditions, and slope. A tree's viability for retention depends on its likelihood for survival and preservation (> 10 years). Viability depends on growing hazards, defects, injuries, and other problems that would be detrimental to tree health, people, or property in the future.

Hazard assessment is categorized into four types of risk within a five-year period: *improbable*, *possible*, *probable*, and *imminent*. *Improbable* risk means the tree is stable, void of defects, and unlikely to fail under normal weather conditions and may not fail during severe weather conditions. *Possible* risk means failure could occur but is unlikely under normal weather conditions. *Probable* risk means the tree or part of the tree is highly likely to fail within a given time. Trees with *imminent* risk should be worked on as soon as possible.

Tree Inventory Table:

Tag #	Species	DSH	LOD	Viable	Condition
8102	Red cedar <i>Thuja plicata</i>	30.1"	25.0'	Yes	Sturdy tree with co-dominant stems twisted together. V-shaped crotch 30' up. <i>Improbable</i> risk of whole tree or large part failure.
8089	Black walnut <i>Juglans nigra</i>	35.8"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8103	Red cedar	17.8"	14.0'	No	Tree has a 10-degree lean with a contorted top canopy. Co-dominant stems from previous canopy break. <i>Possible</i> risk of large part failure.
8088	Lawson cypress <i>Chamaecyparis lawsoniana</i>	20.0" 9.5" [22.1"]	18.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8087	Red cedar	10.5"	8.0'	No	Suppressed tree with an asymmetric canopy. Vulnerable to wind if exposed. <i>Possible</i> whole tree failure. Not viable because of poor structure.
4001	Ponderosa pine <i>Pinus ponderosa</i>	26.3"	20.0'	No	Tree is mostly dead. Foliage is very thin. No signs of decay. <i>Possible</i> whole tree failure. Not viable because of poor health.
8106	Beech <i>Fagus sylvatica</i>	34.5"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
4002	Black walnut	15.5"	12.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8198	Black walnut	9.2"	6.0'	Yes	Sturdy tree with no signs of decay or disease. Top canopy previous break with stem re-growth. <i>Improbable</i> risk of whole tree or large part failure.
8166	Red alder <i>Alnus rubra</i>	14.0"	10.0'	No	Asymmetric canopy and root system. 15 degree lean with no correction. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8152	Red alder	12.1"	8.0'	No	Tree has no signs of decay or disease. Asymmetric canopy to the south. <i>Possible</i> risk of whole tree failure.
8151	Red alder	14.0"	10.0'	No	Tree has an asymmetric root system and a decay pocket at the trunk base. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8150	Red alder	8.5"	6.0'	No	Phytophthora disease along the trunk. Foliage is thin. <i>Possible</i> risk of whole tree failure. Not viable because of poor health.
8149	Red alder	10.7"	-	No	Dead. Phytophthora disease.
8163	Apple <i>Malus sp.</i>	7.3"	6.0'	Yes	Sturdy tree with an asymmetric canopy to the south. Large dead branch. <i>Possible</i> large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
4003	Red alder	11.5"	8.0'	No	Tree has no signs of decay or disease. Asymmetric canopy to the south. <i>Possible</i> risk whole tree failure. Not viable because of poor structure.
8155	Red alder	9.1"	6.0'	No	Tree has no signs of decay or disease. Asymmetric canopy to the south. <i>Possible</i> risk whole tree failure. Not viable because of poor structure.
8154	Red alder	13.7" 9.0" [16.4"]	12.0'	No	Tree has an asymmetric canopy to the south with a decay pocket at the trunk base. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8136	Red alder	11.7"	8.0'	No	Phytophthora disease along the trunk. Foliage is thin. <i>Possible</i> risk of whole tree failure. Not viable because of poor health.
8135	Red alder	15.0"	12.0'	No	Tree has an asymmetric canopy with a 10 degree lean to the south. Seam along the trunk base (1'). <i>Improbable</i> risk of whole tree or large part failure.
8146	Red alder	15.0"	-	No	Dead.
8141	Red alder	13.5"	10.0'	No	Tree has an asymmetric canopy with a 10 degree lean to the south. Foliage is thin. Minor phytophthora disease on the trunk. <i>Probable</i> risk of whole tree failure. Not viable because of poor health and structure.
8142	Red alder	7.5"	6.0'	No	Tree has an asymmetric canopy with a bowed stem. Bark canker activity near the trunk base. Vulnerable to wind exposure. <i>Probable</i> whole tree failure.
8143	Red alder	9.0"	6.0'	No	Tree has an asymmetric canopy with a 10 degree lean to the east. Foliage is sparse. <i>Possible</i> whole tree failure. Not viable because of poor structure.
8144	Red alder	8.8"	6.0'	No	The canopy bows to the east. Vulnerable to wind exposure. <i>Possible</i> whole tree failure. Not viable because of poor structure.
8145	Red alder	10.9"	8.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Foliage is sparse. 30% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure.
8499	Red alder	8.0"	-	No	Dead.
8498	Red alder	10.5"	8.0'	Yes	Asymmetric canopy to the east. No signs of decay or disease. 50% live crown ratio. <i>Improbable</i> risk of whole tree failure.
8496	Red alder	8.0"	-	No	Dead.
8497	Red alder	10.0"	-	No	Dead.
8500	Red alder	10.7"	8.0'	Yes	No signs of decay or disease. 10-degree lean. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure.

Tag #	Species	DSH	LOD	Viable	Condition
4004	Red alder	11.5"	10.0'	No	Tree has a curved trunk. No signs of decay or disease. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8487	Red alder	14.0"	11.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Foliage is sparse. <i>Improbable</i> risk of whole tree or large part failure.
8483	Red alder	9.5"	8.0'	No	No signs of decay or disease. Foliage is sparse. 25% live crown ratio. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8484	Red alder	9.0"	-	No	Dead.
8148	Red alder	9.7"	8.0'	No	No signs of decay or disease. Foliage is sparse. 25% live crown ratio. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8147	Red alder	12.5"	10.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8069	Beech	37.0"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8067	Sycamore <i>Platanus acerifolia</i>	45.2"	35.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
4005	Red cedar	21.3"	18.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8192	Red cedar	36.0"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8168	Red cedar	34.6"	28.0'	Yes	Seam (3') along the trunk base. Asymmetric canopy to the SE. <i>Improbable</i> risk of whole tree or large part failure.
8193	Big-leaf maple	48.0"	-	No	Dead.
8194	Red cedar	31.0"	25.0'	No	Decay pocket 20' up trunk. Nesting hole with 6" diameter. Asymmetric canopy. 30% live crown ratio. <i>Possible</i> risk of large part failure. Not viable because of poor health.
8170	Red cedar	22.9"	18.0'	Yes	Contorted trunk. No signs of decay or disease. Asymmetric canopy to the east. <i>Improbable</i> risk of whole tree or large part failure.
8393	Red cedar	31.5"	25.0'	Yes	No signs of decay or disease. Asymmetric canopy to the south. 50% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8394	Red cedar	40.2"	30.0'	Yes	No signs of decay or disease. Asymmetric canopy to the north. 50% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure.
8395	Douglas fir <i>Psuedotsuga menziesii</i>	45.5"	35.0'	Yes	No signs of decay or disease. Asymmetric canopy to the east. 50% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure.
8400	Douglas fir	45.5"	35.0'	Yes	No signs of decay or disease. Asymmetric canopy to the east. 50% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure.
8401	Douglas fir	38.0"	30.0'	Yes	Leaning trunk with corrected canopy. Asymmetric canopy to the east. 50% live crown ratio. Branch rub on main trunk. <i>Possible</i> large part failure.
8398	Red cedar	21.8"	18.0'	No	Signs of internal decay. Bird hole activity along the trunk. Trunk bows to the west. 80% live crown ratio. <i>Possible</i> risk of whole tree or large part failure. Not viable because of poor structure.
8397	Douglas fir	33.3"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8396	Douglas fir	24.0"	20.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8421	Big-leaf maple	35.0"	30.0'	No	Hollow trunk with excessive decay. <i>Probable</i> risk of whole tree failure. Not viable because of poor health and structure.
8420	Big-leaf maple	24.0"	20.0'	No	Hollow trunk with excessive decay. Asymmetric canopy to the west. <i>Probable</i> whole tree failure. Not viable because of poor health and structure.
8403	Douglas fir	37.0"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8406	Red cedar	30.8"	25.0'	No	Sapwood exposed around the base (5'x6' area, 75% circumference). <i>Probable</i> risk of whole tree failure. Not viable because of poor health.
8405	Douglas fir	31.1"	26.0'	No	Tree has signs of internal decay. Asymmetric canopy to the east. 25% live crown ratio. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8404	Douglas fir	31.3"	26.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8419	Western hemlock <i>Tsuga heterophylla</i>	15.8"	12.0'	No	Asymmetric root system to the SW. Signs of root decay. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8418	Big-leaf maple	27.0"	22.0'	Yes	No signs of decay or disease. Asymmetric canopy to the west. <i>Improbable</i> risk of whole or large part failure.
8417	Big-leaf maple	25.2"	22.0'	Yes	No signs of decay or disease. Asymmetric canopy to the west. <i>Improbable</i> risk of whole tree or large part failure.
8411	Big-leaf maple	18.9"	16.0'	Yes	No signs of decay or disease. Asymmetric canopy to the NW. <i>Improbable</i> risk of whole tree or large part failure.
4006	Big-leaf maple	8.0"	6.0'	Yes	Suppressed. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8409	Big-leaf maple	9.7"	8.0'	Yes	Suppressed. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8408	Big-leaf maple	21.8" 22.2" 12.8" [33.6"]	28.0'	Yes	No signs of decay or disease. Asymmetric canopy to the east. <i>Improbable</i> risk of whole tree or large part failure.
8412	Douglas fir	44.8"	35.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8413	Big-leaf maple	24.0"	20.0'	Yes	Tree has a 20-degree lean and asymmetric canopy to the east. 3' seam along the trunk base. <i>Improbable</i> risk of tree failure.
8425	Big-leaf maple	16.8"	14.0'	No	Tree has a 40-degree bend in the trunk with asymmetric canopy and root system. <i>Possible</i> risk for whole tree or large part failure. Not viable because of poor structure.
8454	Big-leaf maple	21.0"	18.0'	Yes	No signs of decay or disease. Asymmetric canopy to the east. <i>Improbable</i> risk of whole tree or large part failure.
8453	Big-leaf maple	8.0"	6.0'	Yes	Suppressed tree with no signs of decay or disease. <i>Possible</i> risk for whole tree failure.
8452	Big-leaf maple	20.5"	18.0'	Yes	Tree has a 20-degree lean with a corrected, but asymmetric canopy to the NE. <i>Possible</i> risk of whole tree failure.
8451	Big-leaf maple	17.2"	14.0'	No	Decay pocket at trunk base 1'x3'. Dead branch from main crotch. <i>Possible</i> risk of whole tree or large part failure. Not viable because of poor structure.
8450	Big-leaf maple	20.0"	16.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8449	Big-leaf maple	14.8"	12.0'	No	Tree has a 15-degree lean without correction and asymmetric canopy to the east. Foliage is sparse. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.

Tag #	Species	DSH	LOD	Viable	Condition
8448	Big-leaf maple	16.7"	14.0'	No	Hollow trunk with decay. <i>Possible</i> risk of whole tree failure. Not viable because of poor condition.
8447	Big-leaf maple	19.5"	16.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8446	Big-leaf maple	13.0"	10.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8444	Big-leaf maple	16.5"	14.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8441	Big-leaf maple	15.8"	14.0'	Yes	Asymmetric root system to the west. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8437	Big-leaf maple	19.5"	16.0'	No	Hollow trunk with decay. <i>Possible</i> risk of whole tree failure. Not viable because of poor condition.
8436	Big-leaf maple	16.2"	14.0'	No	Asymmetric canopy to the south. Asymmetric root system to the north. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8438	Big-leaf maple	7.0"	6.0'	Yes	Suppressed. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8430	Big-leaf maple	17.0"	15.0'	No	Bark canker and decay with the large west side stem. <i>Probable</i> risk of large part tree failure. Not viable because of poor health.
8431	Big-leaf maple	6.0"	6.0'	Yes	Suppressed. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8432	Red cedar	6.5"	6.0'	Yes	Asymmetric root system to the south. No signs of decay or disease. <i>Possible</i> risk of whole tree failure.
8347	Big-leaf maple	11.1"	8.0'	No	Asymmetric canopy to the south. Asymmetric root system to the north. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8350	Big-leaf maple	29.8"	25.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8349	Big-leaf maple	13.5"	12.0'	No	Asymmetric canopy to the east. Asymmetric root system north. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8348	Big-leaf maple	11.0"	8.0'	No	Broken canopy (no canopy). Sprout growth along the trunk. <i>Improbable</i> risk of tree failure. Not viable because of poor structure.
8345	Big-leaf maple	9.0"	6.0'	No	Asymmetric canopy to the east. Abnormal trunk growth. <i>Possible</i> risk of large part tree failure. Not viable because of poor structure.

Tag #	Species	DSH	LOD	Viable	Condition
8344	Red cedar	23.8"	20.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8342	Douglas fir	34.5"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8343	Douglas fir	7.0"	-	No	Dead.
8335	Big-leaf maple	23.3"	20.0'	Yes	Asymmetric canopy to the north. No signs of decay or disease. <i>Possible</i> risk of large part tree failure.
8336	Red cedar	10.5"	8.0'	No	Suppressed tree with a maple twisted around trunk. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8333	Red cedar	14.9"	12.0'	Yes	Sturdy tree joined with a Douglas fir. No signs of decay or disease. <i>Improbable</i> risk of whole tree failure.
8334	Douglas fir	20.2"	16.0'	No	Severe bark cankers around the trunk base. Joined with cedar tree. Main stem kinked through maple tree. <i>Possible</i> risk of large part tree failure.
8340	Big-leaf maple	31.6"	26.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8341	Red cedar	8.5"	6.0'	Yes	Suppressed. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure.
8332	Big-leaf maple	31.8"	25.0'	No	Hollow trunk with excessive decay (20'x1') about 30' up the trunk. <i>Possible</i> risk of large part tree failure. Not viable because of poor health and structure.
8337	Red cedar	16.2"	12.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8338	Big-leaf maple	27.4"	24.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the north. <i>Possible</i> risk of large part failure.
8339	Big-leaf maple	25.8"	20.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the north. <i>Possible</i> risk of large part failure.
8314	Red cedar	50.7"	38.0'	Yes	Seam along the west side of the trunk with internal decay. <i>Possible</i> risk of whole tree failure.
8313	Douglas fir	24.2" 21.8" [32.6"]	26.0'	No	Both trunks bow away from each other. Southern trunk is kinked about 60' up. <i>Possible</i> risk of whole tree or large part failure. Not viable because of poor structure.
8312	Red cedar	41.1"	35.0'	No	Tree has internal decay with sparse foliage. Heavy ivy growth. <i>Possible</i> risk of whole tree failure. Not viable because of poor health of structure.

Tag #	Species	DSH	LOD	Viable	Condition
8311	Big-leaf maple	20.8"	16.0'	Yes	Small decay pockets about 20' up the trunk. <i>Possible</i> risk of large part tree failure.
8310	Big-leaf maple	11.5"	9.0'	Yes	Asymmetric canopy to the SW. Heavy ivy growth limits inspection to trunk. <i>Possible</i> risk of whole tree failure.
8309	Big-leaf maple	35.0"	30.0'	Yes	No Signs of decay or disease. Heavy ivy growth limits inspection. <i>Possible</i> risk of large part tree failure.
8308	Big-leaf maple	19.5"	16.0'	Yes	No Signs of decay or disease. Heavy ivy growth limits inspection. <i>Possible</i> risk of large part tree failure.
8306	Big-leaf maple	17.0"	14.0'	No	Decay pocket and a depression in the trunk. Heavy ivy growth limits inspection. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8307	Big-leaf maple	<6.0"	6.0'	Yes	Not a significant tree.
8303	Big-leaf maple	35.5"	30.0'	Yes	No Signs of decay or disease. Heavy ivy growth limits inspection. <i>Possible</i> risk of large part tree failure.
8359	Big-leaf maple	26.0" 25.0" [36.1"]	30.0'	Yes	Asymmetric canopy to the south. No signs of decay or disease. <i>Improbable</i> risk of whole tree or large part failure.
8358	Red cedar	52.0"	35.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8357	Red cedar	17.0"	15.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Foliage is sparse. <i>Improbable</i> risk of whole tree or large part failure.
8356	Red cedar	35.0"	28.0'	No	Top canopy is dead. <i>Probable</i> risk of large part tree failure. Not viable because of poor health.
8302	Red cedar	19.0"	16.0'	Yes	Sturdy tree with no signs of decay or disease. Large bulge at the base of the tree. <i>Improbable</i> risk of whole tree or large part failure.
8293	Big-leaf maple	17.0"	14.0'	Yes	No signs of decay or disease. Asymmetric canopy to the south. <i>Improbable</i> risk of whole tree or large part failure.
8305	Big-leaf maple	16.5"	14.0'	No	Trunk bows upward. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8287	Big-leaf maple	36.6"	30.0'	Yes	Main crotch bulges between trunks. Signs of internal decay or included bark. <i>Possible</i> risk of large part tree failure.
8315	Big-leaf maple	21.7"	18.0'	Yes	Trunk is kinked about 20' up. Asymmetric canopy to the west. No signs of decay or disease. <i>Possible</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8328	Red cedar	26.3"	22.0'	No	Long seam (5') along trunk about 15' up. Asymmetric canopy to the west. Vulnerable to wind exposure. <i>Possible</i> risk of large part tree failure. Not viable because of poor structure.
8330	Red cedar	43.5"	35.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8329	Douglas fir	34.0"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8331	Red cedar	32.1"	26.0'	Yes	Seam along the base of the trunk (4'). Signs of internal decay. <i>Possible</i> risk of whole tree failure.
8327	Red cedar	29.5"	25.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8326	Red cedar	34.5"	28.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8319	Douglas fir	27.0"	22.0'	No	Top canopy broke off. <i>Improbable</i> risk of tree failure. Not viable because of no structure.
8318	Red cedar	30.0"	25.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8317	Douglas fir	30.1"	25.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8324	Douglas fir	28.8"	24.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8325	Red cedar	31.4"	26.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8320	Western hemlock	12.0"	10.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Root system over nurse log. <i>Improbable</i> risk of whole tree or large part failure.
8321	Big-leaf maple	5.5"	6.0'	Yes	Not a significant tree. No problems.
8352	Western hemlock	6.0"	6.0'	Yes	No signs of decay or disease. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure.
8322	Red cedar	35.0"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8323	Red cedar	38.0"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8433	Western hemlock	9.0"	6.0'	No	Asymmetric canopy to the SE. Asymmetric root system to the west. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8434	Red cedar	7.8"	6.0'	Yes	No signs of decay or disease. Asymmetric canopy to the east. <i>Improbable</i> risk of whole tree or large part failure.
8251	Red cedar	36.0"	30.0'	No	Hollow trunk with 2'x4' opening. Excessive decay. <i>Possible</i> risk of whole tree failure. Not viable because of poor condition.
8249	Big-leaf maple	32.8"	26.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8250	Red cedar	18.4"	15.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8248	Douglas fir	39.6"	32.0'	Yes	No signs of decay or disease. Neighboring cedar tree girdles base of fir. <i>Possible</i> risk of whole tree failure.
8247	Red cedar	20.2"	16.0'	No	Hollow trunk and excessive decay. <i>Possible</i> risk of whole tree failure. Not viable because of poor condition.
8272	Big-leaf maple	26.4"	22.0'	No	Decay in the trunk base. Buttress roots act as stilts. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8244	Big-leaf maple	19.7" 34.5" [39.7"]	32.0'	No	Large seam 30' up the tree. Signs of internal decay. <i>Possible</i> risk of large part failure. Not viable because of poor structure.
8245	Big-leaf maple	12.5"	10.0'	No	Tree leans 15-degrees with an asymmetric canopy to the west. No signs of decay or disease. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8243	Red cedar	27.9"	22.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8226	Big-leaf maple	39.0"	32.0'	Yes	Signs of internal decay. Asymmetric canopy to the south. <i>Possible</i> risk of whole tree or large part failure.
8225	Big-leaf maple	12.2"	10.0'	Yes	No signs of decay or disease. Asymmetric root system to the south. <i>Possible</i> risk of whole tree failure.
8224	Western hemlock	6.8"	6.0'	Yes	No signs of decay, disease, or structural defects. Root system over nurse log. <i>Improbable</i> risk of whole tree failure.
8227	Red cedar	24.0"	20.0'	Yes	Sturdy tree with hollow trunk and open decay pocket (2'x1'). <i>Improbable</i> risk of whole tree failure.


Tag #	Species	DSH	LOD	Viable	Condition
8228	Douglas fir	6.5"	6.0'	No	Suppressed with no signs of decay or decay. Asymmetric root system to the west. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8233	Big-leaf maple	8.8"	6.0'	Yes	No signs of decay or disease. Asymmetric canopy to the SE. <i>Improbable</i> risk of tree failure.
8229	Douglas fir	36.2"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8230	Western hemlock	5.5"	6.0'	Yes	Not a significant tree.
8231	Big-leaf maple	26.1"	24.0'	No	Hollow trunk with excessive decay. Asymmetric canopy to the east. <i>Probable</i> risk of whole tree failure. Not viable because of poor condition.
8234	Big-leaf maple	7.5"	6.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the east. <i>Possible</i> risk large part tree failure.
8232	Big-leaf maple	6.7"	6.0'	Yes	Tree has no signs of decay or disease. Asymmetric root system of the west. <i>Possible</i> risk of whole tree failure.
8223	Vine maple	<6.0"	6.0'	Yes	Not a significant tree.
8237	Big-leaf maple	5.5"	6.0'	Yes	Not a significant tree.
8236	Western hemlock	4.0" 5.5" [6.8"]	6.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8425	Big-leaf maple	14.2"	12.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8426	Big-leaf maple	6.0" 4.0" [7.2"]	6.0'	No	No signs of decay or disease. Asymmetric canopy to the south. Vulnerable to wind exposure. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8427	Big-leaf maple	16.6"	12.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8429	Western hemlock	4.0" 6.8" [7.9"]	6.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Root system over nurse stump. <i>Improbable</i> risk of whole tree or large part failure.
4007	Big-leaf maple	8.5"	8.0'	No	Tree has a 30-degree lean and asymmetric canopy to the south with no correction. Damaged by fallen tree years ago. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
4008	Big-leaf maple	8.0"	6.0'	No	Suppressed with no signs of decay or disease. Asymmetric canopy to the SW and root system to the north. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.

Tag #	Species	DSH	LOD	Viable	Condition
8071	Saucer magnolia <i>Magnolia soulangiana</i>	6.5" 6.8" [9.4"]	6.0'	No	Decay at the trunk base. Asymmetric canopy to the east. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
4009	Lawson cypress <i>Chamaecyparis lawsoniana</i>	13.0"	12.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8046	Saucer magnolia	10.2"	8.0'	No	Sapwood is exposed along the trunk. Decay pocket at the trunk base. Against existing foundation. <i>Possible</i> risk of whole tree or large part failure. Not viable because of poor health.
8045	Elkhorn cedar <i>Thuja dolabrata</i>	9.0"	8.0'	No	Exposed sapwood at the trunk base. Foliage is very sparse. Against existing foundation. <i>Possible</i> risk of whole tree failure. Not viable because of poor health.
8033	Austrian pine <i>Pinus nigra</i>	16.5"	14.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Foliage is sparse. <i>Improbable</i> risk of whole tree or large part failure.
8034	Douglas fir	16.3"	14.0'	Yes	Sturdy tree with no signs of decay or disease. Co-dominant stem about 50' up with V-shaped crotch. <i>Possible</i> risk of large part tree failure.
8035	Western hemlock	24.0"	-	No	Dead.
8036	Sweet-gum <i>Liquidambar styraciflua</i>	9.8"	8.0'	No	Signs of internal decay. Asymmetric canopy to the north. <i>Possible</i> risk of whole tree failure. Not viable because of poor structure.
8037	Douglas fir	31.8"	26.0'	Yes	Sturdy tree with no signs of decay or disease. Co-dominant stems with a seam between the trunks. <i>Possible</i> risk of large part failure.
8038	Douglas fir	15.8"	12.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the west. <i>Improbable</i> risk of whole tree or large part failure.
8039	Grand fir <i>Abies grandis</i>	26.3"	24.0'	No	Sturdy tree with no signs of decay or disease. Foliage is very sparse with a 25% live crown ratio. <i>Improbable</i> risk of whole tree or large part failure. Not viable because of poor health.
8028	Red cedar	22.0"	18.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the SE. <i>Improbable</i> risk of whole tree or large part failure.
8029	Red cedar	23.1"	18.0'	Yes	Sturdy tree with no signs of decay or disease. Co-dominant stems with U-shaped crotch. <i>Improbable</i> risk of whole tree or large part failure.
8041	Red cedar	26.4"	22.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the west. <i>Improbable</i> risk of whole tree or large part failure.
8042	Big-leaf maple	19.2"	16.0'	Yes	No signs of decay or disease. Trunk base has abnormal structure. Asymmetric canopy to the south. <i>Possible</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8040	Big-leaf maple	10.0" 10.5" [14.5"]	12.0'	Yes	No signs of decay or disease. Seam between stems on one side. <i>Possible</i> risk of large part tree failure.
8043	Katsura <i>Cercidiphyllum japonicum</i>	8.0" 10.0" 12.0" 12.0" [21.3"]	18.0'	Yes	Sturdy tree exhibiting drought stress in the leaves. Multiple sprout growth from trunk base. Signs of internal decay. <i>Possible</i> risk of large part tree failure.
8104	Lawson cypress	14.3" 12.5" 17.0" 10.5" [27.6"]	22.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8105	Japanese maple <i>Acer palmatum</i>	5.5" 6.5" 7.0" [11.0"]	8.0'	No	Mostly dead. Severe bark cankers. <i>Possible</i> risk of failure. Not viable because of poor health.
8107	Plum <i>Prunus cerasifera</i>	5.5"	6.0'	Yes	Not a significant tree.
8108	Red alder	11.3"	10.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8110	Red alder	5.0" 6.0" 3.0" [8.4"]	8.0'	No	Top canopy is dead. No signs of decay along the trunk. <i>Possible</i> risk of large part failure.
8111	<i>Ginkgo biloba</i>	14.0"	12.0'	Yes	Sturdy tree with no signs of decay or disease. Asymmetric canopy to the east. <i>Improbable</i> risk of whole tree or large part failure.
8113	Filbert <i>Corylus cornuta</i>	4.5" 5.5" 6.0" [9.3"]	8.0'	Yes	Sturdy tree with no signs of decay or disease. Older top canopy is dead. Many healthy new stems and sprouts. <i>Improbable</i> risk of whole tree or large part failure.
8114	Red alder	15.0"	12.0'	No	The top portion of the canopy is dead. Probable large part failure. Not viable because of poor health.
8115	Red alder	8.0"	6.0'	No	The top portion of the canopy is dead. Probable large part failure. Not viable because of poor health.
8125	Red alder	18.0"	16.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. Ivy covers the trunk. <i>Improbable</i> risk of whole tree or large part failure.
8127	Red alder	9.0"	8.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.

Tag #	Species	DSH	LOD	Viable	Condition
8488	Red alder	15.9"	14.0'	Yes	Sturdy tree with no signs of decay. Side stem is dead. Small spots of Phytophthora cankers at trunk base. <i>Improbable</i> risk of whole tree or large part failure.
8416	Douglas fir	41.7"	30.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8456	Western hemlock	9.0"	-	No	Dead.
8455	Big-leaf maple	16.6"	14.0'	No	No signs of decay. Dead lower branches. Asymmetric canopy to the east. <i>Possible</i> risk of whole or large part failure. Not viable because of poor structure.
8445	Big-leaf maple	16.2"	14.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8222	Vine maple <i>Acer circinatum</i>	3.0" 4.0" [5.0"]	6.0'	Yes	Not a significant tree.
8239	Big-leaf maple	22.0"	20.0'	No	Half of the trunk has decayed away with one side of the trunk remaining. Area of open decay is 2'x8'. <i>Probable</i> risk of whole tree failure. Not viable because of poor structure and health.
8214	Big-leaf maple	19.1"	16.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8207	Western hemlock	9.5"	8.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8206	Big-leaf maple	20.4" 23.0" 24.5" [39.3"]	30.0'	No	Tree has visible heartwood decay with the middle and northern trunks. Hollow pockets. Possible risk of whole or large part failure. Not viable because of excessive decay.
8204	Big-leaf maple	20.5"	18.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.
8205	Western hemlock	15.5"	14.0'	Yes	Sturdy tree with no signs of decay, disease, or structural defects. <i>Improbable</i> risk of whole tree or large part failure.

 Trees off site.

 Trees within the critical areas.

171 significant living trees within the buildable areas.

Tree Retention Table:

Tag #	Species	DSH
8287	Maple	36.6"
8239	Maple	22.0"
8214	Maple	19.1"
8204	Maple	20.5"
8205	Hemlock	15.5"
8206	Maple	39.3"
8127	Alder	9.0"
8125	Alder	18.0"
8114	Alder	15.0"
8115	Alder	8.0"
8103	Cedar	17.8"
8104	Cypress	27.6"
8105	<i>Acer p.</i>	11.0"
8106	Beech	34.5"
8107	Plum	5.5"

Tag #	Species	DSH
8108	Alder	11.3"
8110	Alder	8.4"
8111	Ginkgo	14.0"
8113	Filbert	9.3"
8114	Alder	15.0"
8087	Cedar	10.5"
8088	Cypress	22.1"
4001	Pine	26.3"
4009	Cypress	13.0"
8069	Beech	37.0"
8071	Magnolia	9.4"
8033	Pine	16.5"
8036	Sweetgum	9.8"
8039	Grand fir	26.3"

29 retained trees within the buildable areas. This is approximately a 17% retention plan [(29 trees / 171 trees) x 100%] within the buildable areas. In addition, the east side of the property has the most tree diversity.

Tree Protection Plan:

Protective fencing is required around the perimeters of the LOD for each retained tree, or grove of trees during grading and construction. Chain-link fencing is recommended to protect and preserve the trees from soil disturbance due to machines, foot traffic, and materials. Grading and construction should not be allowed within the LOD of retained trees, unless described in this report. The following site map shows the LODs and recommended placement for protection fencing around retained trees. Signage is recommended on the fence that indicates "Tree Protection Area, Do Not Enter".

I allow the protection fencing to cut across part of the LOD of Cedar trees 8103, 8243, and Maple trees 8303 and 8287 to provide maximum buildable area. This fencing plan disturbs less than 30% of the outer root zone area and protects the inner root zone area. The threshold for outer root zone disturbance is no more than 30% of the area, not including the inner root zone area. The following calculations show the square feet (SF) of allowable disturbance to the outer root zones of trees 8103, 8243, 8303, and 8287.

Cedar 8103:

Inner root zone area = $\pi r^2 = \pi (7.0')^2 = 153.9 \text{ SF}$.

Outer root zone area = $\pi r^2 = \pi (\text{LOD})^2 = \pi (14.0')^2 = 615.4 \text{ SF} - 153.9 \text{ SF} = 461.5 \text{ SF}$

$461.5 \text{ SF} \times 30\% = 138.5 \text{ SF}$.

Protective fencing for tree 8103 may expose no more than 139.0 SF of the outer root zone and not intersect the inner root zone.

Maples 8303 and 8287:

Inner root zone area = $\pi r^2 = \pi (15.0')^2 = 706.5 \text{ SF}$.

Outer root zone area = $\pi r^2 = \pi (\text{LOD})^2 = \pi (30.0')^2 = 2,826.0 \text{ SF} - 706.5 \text{ SF} = 2,119.5 \text{ SF}$

$2,119.5 \text{ SF} \times 30\% = 635.9 \text{ SF}$.

Protective fencing for trees 8303 and 8287 may expose no more than 636.0 SF of the outer root zone and not intersect the inner root zone.

Cedar 8243:

Inner root zone area = $\pi r^2 = \pi (11.0')^2 = 379.9 \text{ SF}$.

Outer root zone area = $\pi r^2 = \pi (\text{LOD})^2 = \pi (22.0')^2 = 1,519.8 \text{ SF} - 379.9 \text{ SF} = 1,139.9 \text{ SF}$

$1,139.9 \text{ SF} \times 30\% = 342.0 \text{ SF}$.

Protective fencing for tree 8243 may expose no more than 342.0 SF of the outer root zone and not intersect the inner root zone.

Please reply if you have questions.

Thank you,

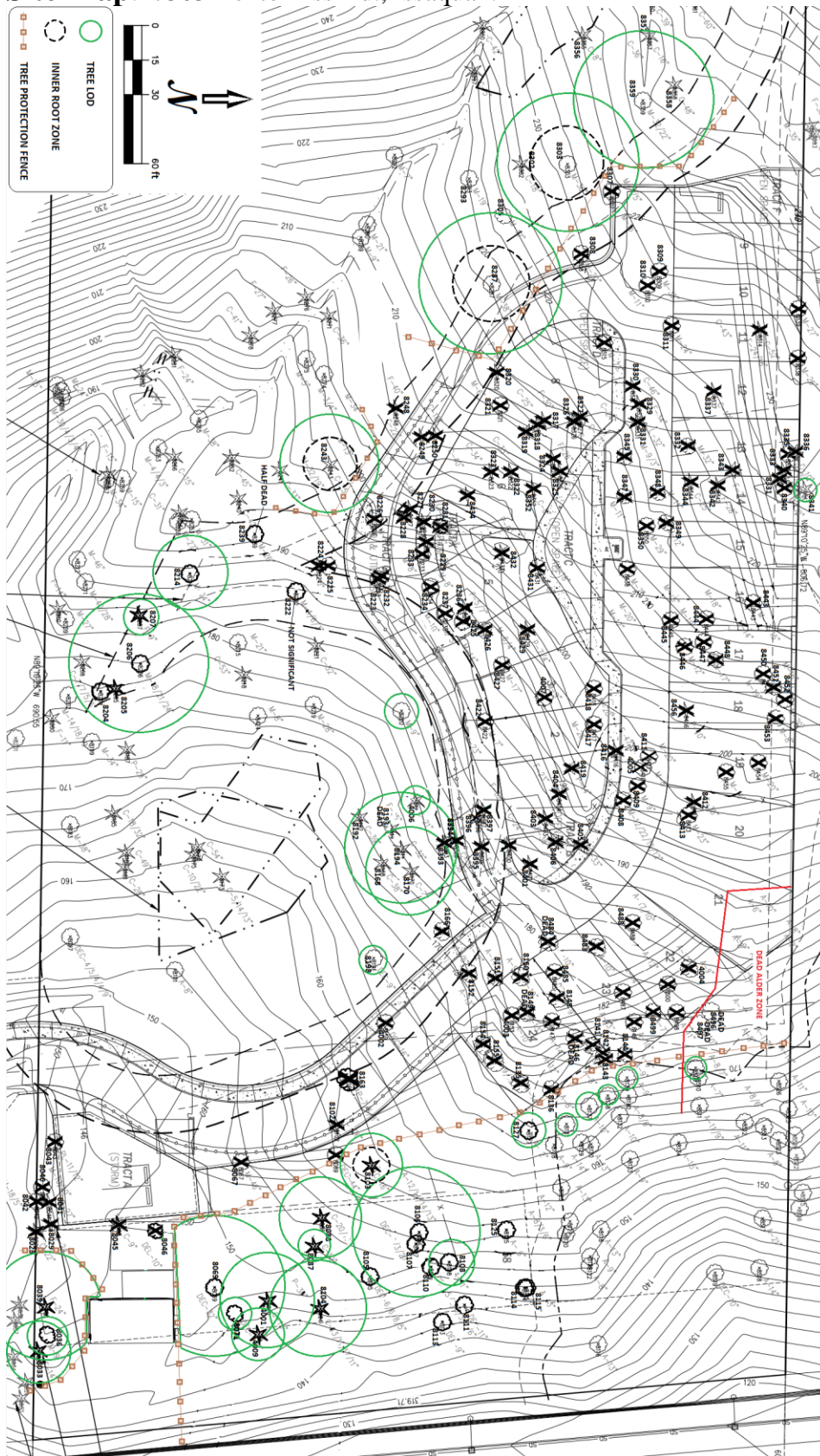


Lonnie Olson, Owner

ISA Certified Arborist (PN-5427A) exp. 12/31/2020

Qualified Tree Risk Assessor (#697) exp. 7/23/2024

Site Map: 7303 Renton-Issa Rd., Issaquah.



Assumptions & Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. All data has been verified insofar as possible; however, I can neither guarantee nor be responsible for the accuracy of information provided by others.
3. I shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee.
4. Loss or alteration of any part of this report invalidates the entire report.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
6. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in my qualification.
7. This report and values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
8. Sketches, diagrams, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
9. Unless expressed otherwise: (1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Certification of Performance & Appraisal

I, Lonnie Olson, certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and that they are made in good faith.

- ☐ I have personally inspected the trees and the property referred to in this report and have stated my findings accurately. The extent of the evaluation or appraisal is stated in the attached report and the terms of assignment.
- ☐ The analysis, opinions, and conclusions stated herein are my own and are based on current scientific procedures and facts.
- ☐ No one provided significant professional assistance to me, except as indicated within the report.
- ☐ My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing with the International Society of Arboriculture. I have been involved in the field of arboriculture in a full-time capacity for a period of more than 23 years.

Lonnie Olson

Signed: _____